

WHAT IS CLAIMED IS:

1. A method of fabricating an array with multiple sets of neighboring features comprising, for each of multiple sets of neighboring features, depositing at least one set of drops from a corresponding same pulse jet dispenser onto a substrate so as to form the array with the sets formed from drops deposited by respective different dispensers.
2. A method according to claim 1 wherein the features formed in different sets are biopolymers.
3. A method according to claim 2 wherein the deposited drops contain the biopolymers.
4. A method according to claim 2 wherein a set of biomonomer containing drops are deposited by the same dispenser for each feature of each of the feature sets.
5. A method according to claim 1 wherein the different dispensers are moved in unison with respect to the substrate during deposition of respective sets of drops from the different dispensers.
6. A method according to claim 5 wherein the different dispensers deposit at least some of the drops of their respective sets on a same pass over the substrate.
7. A method according to claim 2 wherein features within each of multiple feature sets comprise different biopolymers.
8. A method according to claim 7 wherein each feature set has at least ten features with ten different biopolymers.
9. A method according to claim 7 wherein the deposited drops contain the biopolymers.

10. A method according to claim 76 wherein features within each of multiple feature sets comprise polynucleotides or peptides.
11. A method according to claim 1 wherein at least ten different dispensers are used.
12. A method according to claim 1 wherein each set of neighboring features includes at least four features in a non-linear configuration.
13. A method according to claim 1 wherein a distance between at least two neighboring sets is greater than an average distance between features within the sets, both as measured in a same direction.
14. A method of fabricating multiple arrays, comprising fabricating the arrays on a same substrate each according to claim 1, the method additionally comprising separating the substrate into multiple segments each carrying at least one of the arrays.
15. A method according to claim 1 wherein the distance between neighboring sets of features is no greater than 2 mm.
16. A method of fabricating an array with multiple sets of neighboring features comprising, for each of multiple sets of neighboring features, depositing at least one set of drops from a corresponding same dispenser onto a substrate so as to form the array with the sets formed from drops deposited by respective different dispensers, wherein a distance between at least two neighboring sets of features is greater than an average distance between features within the sets, both as measured in a same direction.
17. An apparatus for fabricating an array, comprising:
 - (a) a head system with multiple pulse jet drop dispensers;
 - (b) a transport system to move the head system with respect to a substrate;
 - (c) a processor which controls the head and transport system so as to deposit at least one set of drops from a corresponding same dispenser onto a substrate for each of

multiple sets of neighboring features, so as to form the array with the feature sets formed from drops deposited by respective different dispensers.

18. An apparatus according to claim 17 wherein a distance between at least two neighboring sets of features is greater than an average distance between features within the sets, both as measured in a same direction.

19. An apparatus according to claim 17 additionally comprising a loading station with receptacles to retain multiple different fluids such that the dispensers can be simultaneously brought into contact with respective receptacles for loading the dispensers with the different fluids.

20. An apparatus according to claim 17 wherein each dispenser can hold no more than 100 μ l of a fluid for dispensing drops.

21. An apparatus according to claim 19 wherein a set of biomonomer containing drops is deposited from the same dispenser for each feature of the feature sets.

22. An apparatus according to claim 19 wherein the different dispensers of the head system are moved in unison by the transport system.

23. An apparatus according to claim 22 wherein different dispensers deposit at least some of the drops of their respective drop sets on a same pass over the substrate.

24. An apparatus according to claim 22 wherein the step (a) is repeated with at least ten different dispensers.

25. An apparatus according to claim 22 wherein each set of neighboring features includes at least four features in a non-linear configuration.

26. An apparatus according to claim 22 wherein a distance between at least two neighboring feature sets is greater than a greatest distance separating features within the sets, both distances as measured in a same direction.
27. An apparatus according to claim 22 additionally comprising a substrate cutter, and wherein the processor causes multiple arrays to be fabricated on a same substrate, and additionally causes the cutter to separate the substrate into multiple segments each carrying at least one of the arrays.
28. A method according to claim 22 wherein the distance between neighboring sets of features is no greater than 2 mm.
29. A computer program product for use with an apparatus for fabricating an array having multiple drop dispensers and a processor, the computer program product comprising a computer readable storage medium having a computer program stored thereon which, when loaded into the processor, performs the step of:
- for each of multiple sets of neighboring features, depositing at least one set of drops from a corresponding same dispenser onto a substrate so as to form the array with the sets formed from drops deposited by respective different dispensers and with a distance between at least two neighboring sets of features which is greater than an average distance between features within the sets, both as measured in a same direction..
30. A computer program product according to claim 29 wherein the program coordinates the positioning and firing of pulse-jets.
31. A computer program product according to claim 29 wherein the different dispensers deposit at least some of the drops of their respective drop sets on a same pass over the substrate.
32. A apparatus according to claim 22 wherein the step (a) is repeated with at least ten different dispensers.

33. A computer program product according to claim 22 wherein each set of neighboring features includes at least four features in a non-linear configuration.
34. A computer program product according to claim 22 wherein a distance between at least two neighboring feature sets is greater than a greatest distance separating features within the sets, both distances as measured in a same direction.